Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Previously Presented) A computer-implemented method for executing a program comprising a function call and one or more subsequent instructions, the method comprising steps of:

processing, on a first thread, a function defined by the function call, the function having at least two programmer predefined typical return values;

for each predefined return value, pre-processing on an additional thread, the one or more subsequent instructions which are associated with a given predefined return value, wherein said pre-processing is performed concurrent with the processing of the first thread; and

responsive to completion of the processing of said function on said first thread, wherein said function returns an actual return value upon said completion, continuing processing of the additional thread associated with the actual return value while terminating at least one other additional thread that is not associated with the actual return value, such that the one or more subsequent instructions associated with the actual return value are speculatively executed prior to (i) the completion of the processing of said function and (ii) the return of the actual return value by said function.

2.   (Original) The method of claim 1, wherein the program comprises a plurality of subsequent instructions defining one or more additional functions, the method further comprising:

pre-processing on each additional thread the plurality of subsequent instructions until a function is reached which is of external effect; and

blocking on said function having external effect until the actual return value is determined by the first thread.

3.   (Original) The method of claim 2, wherein the blocking step also blocks on reaching a function which is affected by an external event.

4.-9.   (Cancelled)